IN THE CLAIMS

Please amend the claims as follows:

1. – 2. (Canceled)

3. (Currently Amended) ~~The method defined in Claim 1~~ A method comprising:

decomposing input data into a plurality of code-blocks;

assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders for coding the plurality of code-blocks in parallel so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible, when assigning code-blocks on a code block basis, wherein the plurality of MQ coders comprises first, second, third, and fourth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, HH_2, HL_1 and HH_1 luminance subbands;

the second MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, HH_2, HL_1 and HH_1 subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, HH_2, HL_1 and HH_1 subbands of a second set of chrominance subbands; and

the fourth MQ coder is assigned code-blocks corresponding to a LH_1 luminance subband, a LH_1 subband of the first set of chrominance subbands, and LH_1 subband of the second set of chrominance subbands.

4. (Original) The method defined in Claim 3 wherein the plurality of code-blocks is 4:4:4 data.

5. (Currently Amended) ~~The method defined in Claim 1~~ A method comprising:

decomposing input data into a plurality of code-blocks;

assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders for coding the plurality of code-blocks in parallel so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible, when assigning code-blocks on a code block basis, wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, and sixth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, HH_2, and HH_1 luminance subbands;

the second MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, HH_2, and HH_1 subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, HH_2, and HH_1 subbands of a second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to HL_1 and LH_1 luminance subbands;

the fifth MQ coder is assigned code-blocks corresponding to HL_1 and LH_1 subbands of the first set of chrominance subbands; and

the sixth MQ coder is assigned code-blocks corresponding to a HL_1 and LH_1 subbands of the second set of chrominance subbands.

6. (Original) The method defined in Claim 5 wherein the plurality of code-blocks is 4:4:4 data.

7. (Currently Amended) ~~The method defined in Claim 1~~ A method comprising:

decomposing input data into a plurality of code-blocks;

assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders for coding the plurality of code-blocks in parallel so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible, when assigning code-blocks on a code block basis, wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, sixth, seventh, and eighth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3 luminance subbands and an HL_1 subband of a first set of chrominance subbands;

the second MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3 subbands of the first set of chrominance subbands and a HL_1 subband of a second set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, LH_2 and LH_1 subbands of the second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to LH_2, HH_2 and LH_1 luminance subbands;

the fifth MQ coder is assigned code-blocks corresponding to LH_2 and HH_1 luminance subbands and a LH_2 subband of the first set of chrominance subbands;

the sixth MQ coder is assigned code-blocks corresponding to a LH_1 luminance subband and LH_2 and HH_2 subbands of the first set of chrominance subbands;

the seventh MQ coder is assigned code-blocks corresponding to a LH_1 subband of the first set of chrominance subbands and LH_2 and HH_2 subbands of the second set of chrominance subbands; and

the eighth MQ coder is assigned code-blocks corresponding to a HH_1 subband of the first set of chrominance subbands and a HH_1 subband of the second set of chrominance subbands.

8. (Original) The method defined in Claim 7 wherein the plurality of code-blocks is 4:4:4 data.

9. (Currently Amended) ~~The method defined in Claim 1~~ A method comprising:

decomposing input data into a plurality of code-blocks;

assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders for coding the plurality of code-blocks in parallel so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible, when assigning code-blocks on a code block basis, wherein the plurality of MQ coders comprises first, second, third, and fourth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, HH_2, and HH_1 luminance subbands;

the second MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, HH_2, and HL_1 subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, HH_2, and HL_1 subbands of a second set of chrominance subbands; and

the fourth MQ coder is assigned code-blocks corresponding to HL_1 and LH_1 luminance subbands.

10. (Original) The method defined in Claim 9 wherein the plurality of code-blocks is 4:2:2 data.

11. (Currently Amended) ~~The method defined in Claim 1~~ A method comprising:

decomposing input data into a plurality of code-blocks;

assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders for coding the plurality of code-blocks in parallel so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible, when assigning code-blocks on a code block basis, wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, and sixth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to LL_3, LH_3, HL_2, LH_2, HH_2 luminance subbands and a LH_2 subband of a first set of chrominance subbands;

the second MQ coder is assigned code-blocks corresponding to LL_3, LH_3, and HH_2 subbands of a second set of chrominance subbands and a HH_1 luminance subband;

the third MQ coder is assigned code-blocks corresponding to LL_3, LH_3, and LH_2 subbands of the first set of chrominance subbands and a HL_1 subband of the second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to a HL_3, HH_3 and LH_1 luminance subbands and a LH_2 subband of the second set of chrominance subbands;

the fifth MQ coder is assigned code-blocks corresponding to a LH_1 luminance subband and LH_3, HH_3 and LH_2 subbands of the second set of chrominance subbands;

the sixth MQ coder is assigned code-blocks corresponding to a HL_3, HH_3, HH_2, and HL_1 subbands of the first set of chrominance subbands.

12. (Original) The method defined in Claim 11 wherein the plurality of code-blocks is 4:2:2 data.

13. (Currently Amended) ~~The method defined in Claim 1~~ A method comprising:

decomposing input data into a plurality of code-blocks;

assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders for coding the plurality of code-blocks in parallel so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible, when assigning code-blocks on a code block basis, wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, sixth, seventh, and eighth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, and HH_2 luminance subbands;

the second MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2 and HH_2 subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, and HH_2 subbands of a second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to a HL_1 luminance subband;

the fifth MQ coder is assigned code-blocks corresponding to a LH_1 luminance subband;

the sixth MQ coder is assigned code-blocks corresponding to a HH_1 luminance subband;

the seventh MQ coder is assigned code-blocks corresponding to a HL_1 subband of the first set of chrominance subbands;

the eighth MQ coder is assigned code-blocks corresponding to a HL_1 subband of the second set of chrominance subbands.

14. (Original) The method defined in Claim 13 wherein the plurality of code-blocks is 4:2:2 data.

15. (Currently Amended) ~~The method defined in Claim 1~~ A method comprising:

decomposing input data into a plurality of code-blocks;

assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders for coding the plurality of code-blocks in parallel so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible, when assigning code-blocks on a code block basis, wherein the plurality of MQ coders comprises first, second, third, and fourth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HH_2, and HL_1 luminance subbands;

the second MQ coder is assigned code-blocks corresponding to HH_1 luminance subband and LL_3, HL_3, LH_3, HH_3, and HH_2 subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to a LH_1 luminance subband and LL_3, HL_3, LH_3, HH_3, and HH_2 subbands of a second set of chrominance subbands; and

the fourth MQ coder is assigned code-blocks corresponding to HL_2 and LH_2 luminance subbands, HL_2 and LH_2 subbands of the first set of chrominance subbands, and HL_2 and LH_2 subbands of the second set of chrominance subbands.

16. (Original) The method defined in Claim 15 wherein the plurality of code-blocks is 4:1:1 data.

17. (Currently Amended) ~~The method defined in Claim 1~~ A method comprising:

decomposing input data into a plurality of code-blocks;

assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders for coding the plurality of code-blocks in parallel so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible, when assigning code-blocks on a code block basis, wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, and sixth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2 and HH_2 luminance subbands;

the second MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2 and HH_2 subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2 and HH_2 subbands of a second set of chrominance subbands;

the fourth MQ-coder is assigned code-blocks corresponding to a HL_1 luminance subband;

the fifth MQ coder is assigned code-blocks corresponding to a LH_1 luminance subband; and

the sixth MQ coder is assigned code-blocks corresponding to a HH_1 luminance subband.

18. (Original) The method defined in Claim 17 wherein the plurality of code-blocks is 4:1:1 data.

19. (Currently Amended) ~~The method defined in Claim 1~~ A method comprising:

decomposing input data into a plurality of code-blocks;

assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders for coding the plurality of code-blocks in parallel so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible, when assigning code-blocks on a code block basis, wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, sixth, seventh, and eighth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, and HH_2 luminance subbands;

the second MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, and HH_2 subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3 and HH_2 subbands of a second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to a HL_2 luminance subband, a HL_2 subband of the first set of chrominance subbands, and a HL_2 subband of the second set of chrominance subbands;

the fifth MQ coder is assigned code-blocks corresponding to a LH_2 luminance subband, a LH_2 subband of the first set of chrominance subbands, and a LH_2 subband of the second set of chrominance subbands;

the sixth MQ coder is assigned code-blocks corresponding to a LH_1 luminance subband;

the seventh MQ-coder is assigned code-blocks corresponding to a HL_1 luminance subband;

the eighth MQ coder is assigned code-blocks corresponding to a HH_1 luminance subband.

20. (Original) The method defined in Claim 19 wherein the plurality of code-blocks is 4:1:1 data.

21. – 22. (Canceled)

23. (Currently Amended) ~~The apparatus defined in Claim 21~~ An apparatus comprising:

means for decomposing input data into a plurality of code-blocks;

means for assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders for coding the plurality of code-blocks in parallel so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible when assigning code-blocks on a code block basis, wherein the plurality of MQ coders comprises first, second, third, and fourth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, HH_2, HL_1 and HH_1 luminance subbands;

the second MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, HH_2, HL_1 and HH_1 subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, HH_2, HL_1 and HH_1 subbands of a second set of chrominance subbands; and

the fourth MQ coder is assigned code-blocks corresponding to a LH_1 luminance subband, a LH_1 subband of the first set of chrominance subbands, and LH_1 subband of the second set of chrominance subbands.

24. (Original) The apparatus defined in Claim 23 wherein the plurality of code-blocks is 4:4:4 data.

25. (Currently Amended) ~~The apparatus defined in Claim 21~~ An apparatus comprising:

means for decomposing input data into a plurality of code-blocks;

means for assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders for coding the plurality of code-blocks in parallel so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible when assigning code-blocks on a code block basis, wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, and sixth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, HH_2, and HH_1 luminance subbands;

the second MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, HH_2, and HH_1 subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, HH_2, and HH_1 subbands of a second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to HL_1 and LH_1 luminance subbands;

the fifth MQ coder is assigned code-blocks corresponding to HL_1 and LH_1 subbands of the first set of chrominance subbands; and

the sixth MQ coder is assigned code-blocks corresponding to a HL_1 and LH_1 subbands of the second set of chrominance subbands.

26. (Original) The apparatus defined in Claim 25 wherein the plurality of code-blocks is 4:4:4 data.

27. (Currently Amended) ~~The apparatus defined in Claim 21~~ An apparatus comprising:

means for decomposing input data into a plurality of code-blocks;

means for assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders for coding the plurality of code-blocks in parallel so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible when assigning code-blocks on a code block basis, wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, sixth, seventh, and eighth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3 luminance subbands and an HL_1 subband of a first set of chrominance subbands;

the second MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3 subbands of the first set of chrominance subbands and a HL_1 subband of a second set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, LH_2 and LH_1 subbands of the second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to LH_2, HH_2 and LH_1 luminance subbands;

the fifth MQ coder is assigned code-blocks corresponding to LH_2 and HH_1 luminance subbands and a LH_2 subband of the first set of chrominance subbands;

the sixth MQ coder is assigned code-blocks corresponding to a LH_1 luminance subband and LH_2 and HH_2 subbands of the first set of chrominance subbands;

the seventh MQ coder is assigned code-blocks corresponding to a LH_1 subband of the first set of chrominance subbands and LH_2 and HH_2 subbands of the second set of chrominance subbands; and

the eighth MQ coder is assigned code-blocks corresponding to a HH_1 subband of the first set of chrominance subbands and a HH_1 subband of the second set of chrominance subbands.

28. (Original) The apparatus defined in Claim 27 wherein the plurality of code-blocks is 4:4:4 data.

29. (Currently Amended) ~~The apparatus defined in Claim 21~~ An apparatus comprising:

means for decomposing input data into a plurality of code-blocks;

means for assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders for coding the plurality of code-blocks in parallel so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible when assigning code-blocks on a code block basis, wherein the plurality of MQ coders comprises first, second, third, and fourth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, HH_2, and HH_1 luminance subbands;

the second MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, HH_2, and HL_1 subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, HH_2, and HL_1 subbands of a second set of chrominance subbands; and

the fourth MQ coder is assigned code-blocks corresponding to HL_1 and LH_1 luminance subbands.

30. (Original) The apparatus defined in Claim 29 wherein the plurality of code-blocks is 4:2:2 data.

31. (Currently Amended) ~~The apparatus defined in Claim 21~~ An apparatus comprising:

means for decomposing input data into a plurality of code-blocks;

means for assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders for coding the plurality of code-blocks in parallel so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible when assigning code-blocks on a code block basis, wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, and sixth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to LL_3, LH_3, HL_2, LH_2, HH_2 luminance subbands and a LH_2 subband of a first set of chrominance subbands;

the second MQ coder is assigned code-blocks corresponding to LL_3, LH_3, and HH_2 subbands of a second set of chrominance subbands and a HH_1 luminance subband;

the third MQ coder is assigned code-blocks corresponding to LL_3, LH_3, and LH_2 subbands of the first set of chrominance subbands and a HL_1 subband of the second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to a HL_3, HH_3 and LH_1 luminance subbands and a LH_2 subband of the second set of chrominance subbands;

the fifth MQ coder is assigned code-blocks corresponding to a LH_1 luminance subband and LH_3, HH_3 and LH_2 subbands of the second set of chrominance subbands;

the sixth MQ coder is assigned code-blocks corresponding to a HL_3, HH_3, HH_2, and HL_1 subbands of the first set of chrominance subbands.

32. (Original) The apparatus defined in Claim 31 wherein the plurality of code-blocks is 4:2:2 data.

33. (Currently Amended) ~~The apparatus defined in Claim 21~~ An apparatus comprising:

means for decomposing input data into a plurality of code-blocks;

means for assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders for coding the plurality of code-blocks in parallel so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible when assigning code-blocks on a code block basis, wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, sixth, seventh, and eighth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, and HH_2 luminance subbands;

the second MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2 and HH_2 subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2, and HH_2 subbands of a second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to a HL_1 luminance subband;

the fifth MQ coder is assigned code-blocks corresponding to a LH_1 luminance subband;

the sixth MQ coder is assigned code-blocks corresponding to a HH_1 luminance subband;

the seventh MQ coder is assigned code-blocks corresponding to a HL_1 subband of the first set of chrominance subbands;

the eighth MQ coder is assigned code-blocks corresponding to a HL_1 subband of the second set of chrominance subbands.

34. (Original) The apparatus defined in Claim 33 wherein the plurality of code-blocks is 4:2:2 data.

35. (Currently Amended) ~~The apparatus defined in Claim 21~~ An apparatus comprising:

means for decomposing input data into a plurality of code-blocks;

means for assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders for coding the plurality of code-blocks in parallel so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible when assigning code-blocks on a code block basis, wherein the plurality of MQ coders comprises first, second, third, and fourth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HH_2, and HL_1 luminance subbands;

the second MQ coder is assigned code-blocks corresponding to HH_1 luminance subband and LL_3, HL_3, LH_3, HH_3, and HH_2 subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to a LH_1 luminance subband and LL_3, HL_3, LH_3, HH_3, and HH_2 subbands of a second set of chrominance subbands; and

the fourth MQ coder is assigned code-blocks corresponding to HL_2 and LH_2 luminance subbands, HL_2 and LH_2 subbands of the first set of chrominance subbands, and HL_2 and LH_2 subbands of the second set of chrominance subbands.

36. (Original) The apparatus defined in Claim 35 wherein the plurality of code-blocks is 4:1:1 data.

37. (Currently Amended) ~~The apparatus defined in Claim 21~~ An apparatus comprising:

means for decomposing input data into a plurality of code-blocks;

means for assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders for coding the plurality of code-blocks in parallel so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible when assigning code-blocks on a code block basis, wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, and sixth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2 and HH_2 luminance subbands;

the second MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2 and HH_2 subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, HL_2, LH_2 and HH_2 subbands of a second set of chrominance subbands;

the fourth MQ-coder is assigned code-blocks corresponding to a HL_1 luminance subband;

the fifth MQ coder is assigned code-blocks corresponding to a LH_1 luminance subband; and

the sixth MQ coder is assigned code-blocks corresponding to a HH_1 luminance subband.

38. (Original) The apparatus defined in Claim 37 wherein the plurality of code-blocks is 4:1:1 data.

39. (Currently Amended) ~~The apparatus defined in Claim 21~~ An apparatus comprising:

means for decomposing input data into a plurality of code-blocks;

means for assigning the plurality of code-blocks, on a code-block basis, to a plurality of MQ coders for coding the plurality of code-blocks in parallel so that the number of coefficients coded by each of the plurality of MQ coders is approximately the same, to the extent possible when assigning code-blocks on a code block basis, wherein the plurality of MQ coders comprises first, second, third, fourth, fifth, sixth, seventh, and eighth MQ coders, wherein

the first MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, and HH_2 luminance subbands;

the second MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3, and HH_2 subbands of a first set of chrominance subbands;

the third MQ coder is assigned code-blocks corresponding to LL_3, HL_3, LH_3, HH_3 and HH_2 subbands of a second set of chrominance subbands;

the fourth MQ coder is assigned code-blocks corresponding to a HL_2 luminance subband, a HL_2 subband of the first set of chrominance subbands, and a HL_2 subband of the second set of chrominance subbands;

the fifth MQ coder is assigned code-blocks corresponding to a LH_2 luminance subband, a LH_2 subband of the first set of chrominance subbands, and a LH_2 subband of the second set of chrominance subbands;

the sixth MQ coder is assigned code-blocks corresponding to a LH_1 luminance subband;

the seventh MQ-coder is assigned code-blocks corresponding to a HL_1 luminance subband;

the eighth MQ coder is assigned code-blocks corresponding to a HH_1 luminance subband.

40. (Original) The apparatus defined in Claim 39 wherein the plurality of code-blocks is 4:1:1 data.